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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,507	04/16/2004	Volker A. Blaschke	0150139	1937

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FARJAMI & FARJAMI LLP
Suite 360
26522 La Alameda Ave.
Mission Viejo, CA 92691

EXAMINER

CHIU, TSZ K

ART UNIT	PAPER NUMBER
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2822

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/826,507

Applicant(s)

BLASCHKE ET AL.

Examiner

Tsz K. Chiu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-18, 20 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Applicant's amendment in the reply filed on November 22, 2005 is acknowledged that claim 13 and 19 are canceled.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-21 rejected under 35 U.S.C. 102(b) as being anticipated by Maeda et. al. (6,452,249).

With respect to claim 1, Maeda discloses an active shield (101, Fig. 1) situated in a substrate (1, Fig. 1), said active shield comprising a salicide layer (column 15, lines 14-15) situated on an active region, said active shield having a first conductivity type (column 3, lines 41-42); a passive component (SI, Fig. 8) situated in an interconnect metal layer in (CP, Fig. 8) said semiconductor die, said passive component being situated above said active shield (SI, Fig.8); a salicided active region (101, For example Fig. 1) situated in said silicon substrate (column 36, lines 13-14), said salicided active region situated adjacent to at least one side of said active shield (101, For example Fig. 1), said salicided active region having a second conductivity type (column 3, lines 36-50); wherein said active shield defines an AC ground (101, Fig. 2) for said passive component.

With respect to claim 2, Maeda discloses at least one contact connecting said active shield (101, Fig. 2) to a semiconductor die AC ground.

With respect to claim 3, Maeda discloses a well situated in said silicon substrate (1, Fig. 40), said active shield being situated in said well (274, Fig. 20), said well having said second conductivity type (NW, Fig. 40).

With respect to claim 4, Maeda discloses active shield comprises a plurality of fingers (21L and 21S, Fig. 2), each of said plurality of fingers comprising a salicide segment situated on an active segment (column 15, lines 14-15).

With respect to claim 5, Maeda discloses passive component is an inductor (SI, Fig. 70).

With respect to claim 6, Maeda discloses wherein said salicided active region is situated in said well (272, Fig. 20).

With respect to claim 7, Maeda discloses salicide layer is selected from the group consisting of titanium silicide, cobalt silicide, and nickel mono-silicide (column 17, lines 46-47).

With respect to claim 8, Maeda discloses well is connected to a voltage source (Vcc, Fig. 40), said voltage source being greater than or equal to ground voltage, said voltage source having no AC component (Fig. 16).

With respect to claim 9, Maeda discloses a well situated in said silicon substrate (1, Fig. 40), said active shield being situated in said well (272, Fig. 20), said well having said first conductivity type (NW, Fig. 40).

With respect to claim 10, Maeda discloses a well situated in a substrate (Fig. 40), said well having a first conductivity type (NW, Fig. 40); an active shield situated in said well (272, Fig. 20), said active shield comprising a salicide layer (column 15, lines 14-15) situated on an active region in said well (121 and NW, Fig. 40), said active shield having a second conductivity type (121, Fig. 40); a passive component (SI, Fig. 70) situated in an interconnect metal layer (CP, Fig. 70) in said semiconductor die, said passive component (SI, Fig. 1) being situated above said active shield (101, Fig. 1); a salicided active region (101, For example Fig. 1) situated adjacent to at least one side of said active shield (31, For example Fig. 1), said salicided active region having said first conductivity type (column 3, lines 42-46), said salicided active region being situated in said well (21, For example Fig. 1); wherein said active shield defines an AC ground (101, Fig. 2) for said passive component.

With respect to claim 11, Maeda discloses at least one contact connecting said active shield (101, Fig. 2) to a semiconductor die AC ground.

With respect to claim 12, Maeda discloses active shield comprises a plurality of fingers (21L and 21S, Fig. 2), each of said plurality of fingers comprising a salicide segment situated on an active segment (column 15, lines 14-15).

With respect to claim 14, Maeda discloses passive component is an inductor (SI, Fig. 70).

With respect to claim 15, Maeda discloses salicided active region is connected to a voltage source (Vcc, Fig. 16), said voltage source being greater than or equal to ground voltage, said voltage source having no AC component (Fig. 16).

With respect to claim 16, Maeda discloses salicide layer is selected from the group consisting of titanium silicide, cobalt silicide, and nickel mono-silicide (column 17, lines 46-47).

With respect to claim 17, Maeda discloses a well situated in a substrate (NW, Fig. 40), said well having a first conductivity type (column 45, line 19); an active shield situated in said well (274, Fig. 20), said active shield comprising a plurality of fingers (21L and 21S, Fig. 2), each of said plurality of fingers comprising a salicide segment situated on an active segment (column 15, lines 14-15), said each of said plurality of fingers having a second conductivity type (278, Fig. 20); a salicided active region (101, For example Fig. 1) situated adjacent to at least one side of said active shield (31, For example Fig. 1), said salicided active region having said first conductivity type (column 3, lines 42-46), said salicided active region being situated in said well (21, For example Fig. 1); a passive component situated in an interconnect metal layer in said semiconductor die (SI, Fig. 70), said passive component being situated above said active shield (101, Fig. 1); wherein said active shield defines an AC ground (101, Fig. 2) for said passive component.

With respect to claim 18, Maeda discloses at least one contact connecting said active shield (101, Fig. 2) to a semiconductor die AC ground.

With respect to claim 19, Maeda discloses a salicided active region situated adjacent to at least one side of said active shield (Fig. 40), said salicided active region having said first conductivity type (272, Fig. 40).

With respect to claim 20, Maeda discloses the passive component is an inductor (SI, Fig. 70), wherein said plurality of fingers terminate an electric field of said inductor (column 16, lines 30-39).

With respect to claim 21, Maeda discloses salicided active region is connected to a voltage source (V_{cc} , Fig. 16), said voltage source being greater than or equal to ground voltage, said voltage source having no AC component (Fig. 16).

Response to Arguments

Applicant's arguments filed November 22, 2005 have been fully considered but they are not persuasive. With respect to claim 1-21 with 13 and 19 canceled have been considered but not persuasive for the reason that the substrate is a silicon type material as show in Column 36, lines 13-14 for that reason independent claim 1 is rejected under U.S.C. 102(b).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tsz K. Chiu whose telephone number is 517-272-8656. The examiner can normally be reached on 0800 to 1700.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zandra V. Smith can be reached on 571-272-2429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TKC
February 10, 2006


Zandra V. Smith
Supervisory Patent Examiner
21 Feb 2006